

Applicants : Gururaj M. Katti et al.
Serial No. : 10/662,242
Filed : September 15, 2003
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Attorney's Docket No.: INTEL-005PUS
Intel docket #: P16867

AMENDMENTS TO THE DRAWINGS:

The attached replacement sheets of drawings include changes to FIGS. 1, 3 to 8 and 13 and replace the original sheet including FIGS. 1, 3 to 8 and 13.

In Figure 1, 3 to 8 and 13, hand written text was replaced with typed text.

In Figure 6, reference 82, reference 124 and reference 126 was added.

Attachments following last page of this Amendment:

Replacement Sheet (7 pages)

REMARKS

Claims 1 to 25 are pending in this application of which claims 1, 16, 20 and 23 are the independent claims. Favorable reconsideration and further examination are respectfully requested.

Applicants acknowledge the Examiner's indication that claims 4, 12, 14 and 15 would be allowable if rewritten in independent form including the base claim and any intervening claims.

The Examiner objected to the drawings. Based on the foregoing changes to the drawings, Applicants request withdrawal of the drawing objections.

Claims 1 to 25 were rejected under 35 U.S.C. §112, second paragraph, for allegedly being indefinite. The Examiner indicated that it was unclear "how threads take "turns" (see page 3 of the Office Action dated July 31, 2007). Applicants respectfully submit that the claim recites "processors operable to execute the critical section in turns." Applicants submit that is clear that the processors take turns executing the critical section; however Applicants have amended claim 1 to further prosecution. The Examiner also indicated that "to avoid occurrence of idle time" is also unclear. Applicants have also amended claim 1 to address Examiner's rejection. Based on the foregoing changes to claim 1, Applicants respectfully request withdrawal of the §112 rejection.

Claims 1 to 3, 5 to 11, 13 and 16 to 25 were rejected under 35 U.S.C. § 102(e) as being anticipated by Balakrishnan et al. (U.S. Patent Publication Number 20020246980 hereinafter "Balakrishnan").

Amended claim 1 is directed to a method including configuring processors with multiple threads of execution to execute a critical section of code. The processors are operable to execute the critical section in turns. Each processor completes execution of the critical section during their respective turn. The method also includes controlling the threads of execution of the processors to avoid occurrence of idle time between execution of the critical section by the processors by executing threads within a processor in a sequential order.

The applied art is not understood to disclose the foregoing features of claim 1. In particular, Balakrishnan does not disclose that each processor completes execution of the critical section during their respective turn.

Balakrishnan discloses multiple processors (microengines 210-217 in FIG. 3 of Balakrishnan) but he does not disclose processing amongst the processors with respect to a critical section much less that each processor completes execution of the critical section during their respective turn. Applicants respectfully submit that the Examiner based his support this limitation on a passage of Balakrishnan focused on threads executing a critical section rather than processors.

Moreover, Balakrishnan does not disclose controlling the threads of execution of the processors to avoid occurrence of idle time between execution of the critical section by the processors by executing threads within a processor in a sequential order. Balakrishnan discloses that threads are executed in order based on a ordering queue 401 (see paragraph [0034] of Balakrishnan). However, Balakrishnan does not disclose that the order is a sequential order.

Claim 16, 20 and 23 include corresponding features to claim 1. Applicants submit that the Balakrishnan reference should also be withdrawn with respect to claims 16, 20 and 23 for at least the same reasons as claim 1.

For at least the foregoing reasons, Applicants request withdrawal of the art rejection.

Applicants submit that all dependent claims now depend on allowable independent claims.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for withdrawing the prior art cited with regards to any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicants submit that the entire application is now in condition for allowance. Such action is respectfully requested at the Examiner's earliest convenience.

All correspondence should be directed to the address below. Applicants' attorney can be reached by telephone at (781) 401-9988 ext. 123.


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No fee is believed to be due for this Response; however, if any fees are due, please apply such fees to Deposit Account No. 50-0845 referencing Attorney Docket: INTEL-005PUS.

Respectfully submitted,

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